1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

- Identification of the preparation/substance
  Product code: LITHOPONE 30 %
  Types: DS, L, E

- Manufacturer / supplier: Sachtleben Chemie GmbH
  Dr.-Rudolf-Sachtleben-Str. 4
  D-47198 Duisburg, Germany
  Telephone: +49 2066 22-0
  Telefax: +49 2066 22-2000
  E-Mail: info@sachtleben.de

- Use of the substance / preparation: white pigment for paints, coating and paper, white pigment for plastics

- Emergency phone:
  +49 30 30686 790 Giftnotruf Berlin (German/English)
  +1 800 255 3924 CHEMTEL (U S A)
  +358 9 471 977 or +358 9 4711 Poison Information Center (Finland)

- Product Safety: E-Mail: w.gruener@sachtleben.de

2. HAZARDS IDENTIFICATION

- Most important hazards:
  HMIS Ratings: Health: 1 - Flammability: 0 - Reactivity: 1

3. COMPOSITION/INFORMATION ON INGREDIENTS

- Chemical characterization of the substance:

<table>
<thead>
<tr>
<th>CAS-Nr.</th>
<th>Substance identification acc. to EC directive</th>
<th>Danger symbol</th>
<th>Risk-phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>1314-98-3</td>
<td>Zinc sulfide, approx. ZnS 30 %</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7727-43-7</td>
<td>Barium sulfate, BaSO₄ approx. 70% (coprecipitated)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
4. FIRST AID MEASURES

- General indications:
  - Inhalation: Fresh air.
  - Skin contact: Wash off with water.
  - Eye contact: Rinse out with plenty of water.
  - After swallowing: Make victim drink plenty of water. Induce vomiting. Consult doctor in the event of any complaints.

5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media: In adaption to materials stored in the immediate neighbourhood.
- Special exposure hazards: Non-combustible. Ambient fire may liberate hazardous vapours. The following may develop in event of fire: hydrogen sulfide, sulfur oxides.
- Special protective equipment for firefighters: Do not stay in dangerous zone without self-contained breathing apparatus

NFPA Ratings: Health 1 - Flammability: 0 - Reactivity: 1

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions: Avoid generation of dusts; do not inhale dusts.
- Environmental precautions: No further measures

7. HANDLING AND STORAGE

- Handling:
  - Safe handling advice: No special measures.
- Storage:
  - Storage conditions/packing material: Store in original containers in a dry and cool area.
  - Incompatible products: No storage near of acid

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Engineering measures: Maintain exposures below applicable exposure limits:
- Control parameters

<table>
<thead>
<tr>
<th>CAS-Nr.</th>
<th>Substance identification</th>
<th>type</th>
<th>Value</th>
<th>Unit</th>
</tr>
</thead>
</table>
### Personal protection equipment

**Industrial hygiene measures:**
- Keep in clean conditions. Avoid dust formation.

**Respiratory protection:**
- A respirator must be used if the dust concentration is likely to exceed the Occupational exposure limit. At higher concentrations wear particle filter DIN EN 143 - P2. or equivalent approved by NIOSH.

**Hand protection:**
- Prolonged exposure should be avoided by wearing suitable protective gloves and clothing:
  - **In full contact:**
    - **Glove material:** nitrile rubber
    - **Layer thickness:** 0.11 mm
    - **Breakthrough time:** > 480 Min
  - **In splash contact:**
    - **Glove material:** nitrile rubber
    - **Layer thickness:** 0.11 mm
    - **Breakthrough time:** > 480 Min

**Eye protection:**
- The use of an approved dustproof goggles is recommended if the dust concentration is likely to exceed the Occupational exposure limit.

**Skin protection:**
- Barium Sulfates and Zinc Sulfates are not irritant but as with all fine powders can absorb moisture and natural oils from the surface of the skin during prolonged exposure. Prolonged exposure should be avoided by wearing suitable protective gloves and clothing.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance**
- **Physical State:** powder
- **Colour:** white
- **Odour:** none

**Critical Data**
- **Melting point or range:** ZnS > 1,180°C (subl.)
  - BaSO₄ > 1,350 °C
- **Flash point:** n. a.
- **Explosive properties:** No danger of explosion
- **Vapour pressure:** n. a.
- **Density:** approx. 4.3 g/ml
- **Solubility:** < 0.01 g/l
- **pH-value:** approx. 7

### 10. STABILITY AND REACTIVITY

**Conditions to avoid:**
- Oxidizing flame: > 570°C
- Reducing flame: > 875 °C

**Hazardous decomposition products:**
- With acids formation of Hydrogen Sulfide
11. TOXICOLOGICAL INFORMATION

- Toxicological informations
  Acute toxicity: \( \text{LD}_{50} \) (rats, oral) > 15,000 mg/kg
  Local effects: Not toxic
- Practicle experience: Not irritating to eyes and skin

12. ECOLOGICAL INFORMATION

- Further ecological information
  General information: Practically insoluble in water and without any environmental hazard

13. DISPOSAL CONSIDERATIONS

- Residues
- Contaminated packaging
  Reference: Containers that cannot be cleaned must be treated as waste and disposed of in an approved industrial incineration facility. The empty and clean containers may be reused in conformity with regulations.
  Cleanser: water

14. TRANSPORT INFORMATION

- Further information: The product is not classified as a hazardous material according to the DOT, ADR/RID, IMDG, IATA on the transport of dangerous or hazardous goods.

15. REGULATORY INFORMATION

- According to the CPL regulation 1984, as amended, the product is classified as follows:
  Dangerous ingredient for labelling: No special EEC labeling required. This product is labeled in accordance with OSHA’s Hazard Communication Standard.
- National rules
  Water pollution class (in Germany): not harmful to water

National regulations
SARA Title III Sec. 302/303 (Extremely Hazardous Substances): Not listed
SARA Title III Sec. 311/312 (40 CFR 370):
  Hazard Category: None
SARA Title III Sec. 313 (Toxic Chemicals Emissions Reporting):
Product contains zinc sulfide which is subject to the reporting requirements.

CERCLA Hazardous Substance (40 CFR Part 302):
Unlisted hazardous waste characteristics: Zinc Compounds

CANADA WHMIS
Uncontrolled product according to WHMIS classification criteria.

**National registrations**

- **EINECS**: (European Inventory of Existing Commercial Chemical Substances) all components listed
- **ELINCS**: (European List of Notified Chemical Substances) not listed
- **TSCA**: (Toxic Substances Control Act (EPA-Inventory)) all components listed
- **AICS**: (Australien Inventory of Chemical Substances) all components listed
- **DSL**: (Canadien Domestic Substances List) all components listed
- **NDSL**: (Canadien Non-Domestic Substances List) not listed
- **KECI**: (Korean Existing Chemicals Inventory) all components listed
- **PICCS**: (Philippinian Inventory of Commercial Chemical Substances) all components listed
- **BAGT**: (Giftliste des Bundesamts für Abfall und Gesundheitswesen der Schweiz) all components listed
- **METI**: (Ministry of Economy, Trade an Industry - Japan) all components listed
- **SEPA**: (State Environmental Protection Administration - China) all components listed

**16. OTHER INFORMATION**

The data given here are based on current knowledge and experience. The purpose of this Material Safety Data Sheet is to describe the product in terms of its safety requirements. The data do not signify any warranty with regard to the product's properties.